

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Henry da Costa, et al.
Serial No.: Unassigned
Filing Date: November 26, 2003
For: **Systems and Methods for Adaptive Interpretation of Input
From a Touch-Sensitive Input Device**
Art Unit: Unassigned

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

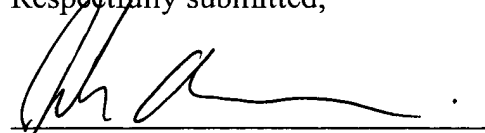
Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants submit herewith on Form PTO-1449 a listing of documents known to the Applicants and/or their attorney. Applicants respectfully request consideration of the cited documents and making the same of record in the prosecution of the above-identified application. In so doing, Applicants do not waive any rights to take appropriate action to establish patentability over the listed documents should they be applied as references against the claims of the present application. Copies of One Hundred Forty-one documents listed on the enclosed CD.

This Information Disclosure Statement is being submitted with the application, and, therefore, no certification or fee is required (37 C.F.R. § 1.97b(1)). However, should any fees be due, the Commissioner is authorized to charge such fees to Deposit Account No. 16-1435. A duplicate of this sheet is attached for that purpose.

Respectfully submitted,



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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet **1** of **7****Complete if Known**

Application Number	Unassigned
Filing Date	November 26, 2003
First Named Inventor	Henry da Costa, et al.
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Attorney Docket Number	IMM174 (51851/279589)

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	1	2,972,140	2/14/1961	Hirsch	
	2	3,157,853	11/17/1964	Hirsch	
	3	3,220,121	11/30/1965	Cutler	
	4	3,497,668	2/24/1970	Hirsch	
	5	3,517,446	6/30/1970	Coryon et al.	
	6	3,623,064	11/23/1970	Kagan	
	7	3,902,687	6/25/1973	Hightower	
	8	3,903,614	9/9/1975	Diamond et al	
	9	3,911,416	10/7/1995	Feder	
	10	4,127,752	11/28/1978	Lowthorp	
	11	4,160,508	7/10/1979	Salsbury	
	12	4,236,325	10/2/1980	Hall et al.	
	13	4,262,549	4/21/1981	Schwellenbach	
	14	4,333,070	6/1/1982	Barnes	
	15	4,464,117	8/7/1984	Forest	
	16	4,484,191	11/20/1984	Vavra	
	17	4,513,235	4/23/1985	Acklam et al.	
	18	4,581,491	4/8/1986	Boothroyd	
	19	4,599,070	7/8/1986	Hladky et al.	
	20	4,708,656	11/24/1987	De Vries et al.	
	21	4,713,007	12/15/1987	Alban	
	22	4,794,392	12/27/1988	Selinko	
	23	4,885,565	12/5/1989	Embach	
	24	4,891,764	1/2/1990	McIntosh	
	25	4,930,770	6/5/1990	Baker	
	26	4,934,694	6/19/1990	McIntosh	
	27	5,019,761	5/28/1991	Kraft	
	28	5,022,384	6/11/1991	Freels	
	29	5,022,407	6/11/1991	Horch et al.	
	30	5,035,242	7/30/1991	Franklin	
	31	5,038,089	8/6/1991	Szakaly	
	32	5,078,152	1/7/1992	Bond	
	33	5,165,897	11/24/1992	Johnson	
	34	5,175,459	12/29/1992	Danial et al.	
	35	5,186,695	2/16/1993	Mangseth et al.	
	36	5,240,417	8/31/1993	Smithson et al.	

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	37	5,271,290	12/21/1993	Fischer	
	38	5,275,174	1/4/1994	Cook	
	39	5,283,970	2/8/1994	Aigner	
	40	5,299,810	4/5/1994	Pierce	
	41	5,309,140	5/3/1994	Everett	
	42	5,334,027	8/2/1994	Wherlock	
	43	5,547,382	8/20/1996	Yamasaki	
	44	5,212,473	5/18/1993	Louis	
	45	5,436,622	7/25/1995	Gutman et al.	
	46	5,437,607	8/1/1995	Taylor	
	47	5,466,213	11/14/1995	Hogan	
	48	5,575,761	11/19/1996	Hajianpour	
	49	5,613,137	3/18/1997	Bertram et al.	
	50	5,627,567	5/6/1997	Davidson	
	49	5,766,016	6/16/1998	Sinclair	
	50	5,785,630	7/28/1998	Bobick et al.	
	51	5,880,411	3/9/1999	Gillespie et al.	
	52	5,887,995	3/30/1999	Holehan	
	53	5,917,906	6/29/1999	Thronton	
	54	5,977,867	11/2/1999	Bouin	
	55	5,995,084	11/30/1999	Chan et al.	
	56	6,057,830	5/0/2000	Chan et al.	
	57	6,111,577	8/29/2000	Zilles et al.	
	58	6,118,435	9/12/2000	Fujita et al.	
	59	6,160,489	12/12/2000	Perry et al.	
	60	6,198,206	3/6/2001	Saarmaa et al.	
	61	6,215,478	4/10/2001	Yeh et al.	
	62	6,218,966	4/17/2001	Goodwin et al.	
	63	6,219,034	4/17/01	Elbing, et al.	
	64	6,307,465	10/23/2001	Kayma et al.	
	65	6,373,463	4/16/2002	Beeks	
	66	6,380,931	4/30/2002	Gillespie et al.	
	67	6,388,655	5/14/2002	Leung	
	68	6,414,671	7/2/2002	Gillespie et al.	
	69	6,422,941	7/23/2002	Thorner et al.	
	70	6,424,338	7/23/2002	Anderson	

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	74	6,429,846	8/6/2002	Rosenberg, et al.	
	75	US 2002/0149561 A1	10/17/2002	Fukumoto et al.	
	76	6,610,936	8/26/03	Gillespie	
	77	US1997000899317	8/26/2003	Gillespie, David W., et al.	

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
	77	EP	0349086		1/3/1990	Stork Kwant B.V.	✓
	78	JP	01-003664		7/19/1990	Taito Corporation	✓
	79	JP	02-109714		1/13/1992	Epoch Co. and Key- Planning Co.	✓
	80	JP	04-007371		8/3/1993	Taito Corporation	✓
	81	JP	05-193862		1/27/1995	Sega Corporation	✓
	82	WO	97/18546 A1		5/22/1997	Gerpheide	✓
	83	JP	2001-350592A		12/21/2001	Ryo et al.	✓
	84	WO	02/12991 A1		2/14/2002	Fukumoto et al.	✓
	85	EP	1182851 A1		2/27/2002	Becker	✓
	86	WO	02/27645		4/4/2002	Franzen	✓
	87	WO	02/31807 A1		4/18/2002	Hwang et al.	✓
	88	JP	2002-259059A		9/13/2002	Motoyama et al.	✓

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		Application Number	Unassigned		
		Filing Date	August 27, 2003		
		First Named Inventor	Henry da Costa, et al.		
		Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	4	of	7	Attorney Docket Number	IMM174 (51851/279589)

OTHER DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	89	ADELSTEIN, "A Virtual Environment System For The Study of Human Arm Tremor," Ph.D. Dissertation, Dept. of Mechanical Engineering, MIT, June 1989.	
	90	ADELSTEIN, "Design and Implementation of a Force Reflecting Manipulandum for Manual Control research," DSC-Vol. 42, Advances in Robotics, Edited by H. Kazerooni, pp. 1-12, 1992.	
	91	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.	
	92	BAIGRIE, "Electric Control Loading - A Low Cost, High Performance Alternative," Proceedings, pp. 247-254, November 6-8, 1990.	
	93	BEJCZY et al., "Kinesthetic Coupling Between Operator and Remote Manipulator," International Computer Technology Conference, The American Society of Mechanical Engineers, San Francisco, CA, August 12-15, 1980.	
	94	BEJCZY, "Sensors, Controls, and Man-Machine Interface for Advanced Teleoperation," Science, Vol. 208, No. 4450, pp. 1327-1335, 1980.	
	95	BEJCZY, "Generalization of Bilateral Force-Reflecting Control of Manipulators," Proceedings Of Fourth CISM-IFTOMM, Sep. 8-12, 1981.	
	96	BEJCZY, et al., "Universal Computer Control System (UCCS) For Space Telerobots," CH2413-3/87/0000/0318501.00 1987 IEEE, 1987.	
	97	BEJCZY et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," SOAR '89 Workshop, JSC, Houston, TX, July 25-27, 1989.	
	98	BLISS, "Optical-to-Tactile Image Conversion for the Blind," IEEE Transactions on Man-Machine Systems, Vol. MMS-11, No. 1, March 1970.	
	99	BROOKS et al., "Hand Controllers for Teleoperation - A State-of-the-Art Technology Survey and Evaluation," JPL Publication 85-11; NASA-CR-175890; N85-28559, pp. 1-84, 03/1/1985.	
	100	BURDEA et al., "Distributed Virtual Force Feedback, Lecture Notes for Workshop on Force Display in Virtual Environments and its Application to Robotic Teleoperation," 1993 IEEE International Conference on Robotics and Automation, pp. 25-44, 05/02/1993.	
	101	CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," Bachelor of Science Thesis, MIT, June 23, 1983.	
	102	CALDWELL et al., "Enhanced Tactile Feedback (Tele-Taction) Using a Multi-Functional Sensory System," 1050-4729/93, pp. 955-960, 1993.	
Examiner Signature		Date Considered	

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	103	"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994.	
	104	EBERHARDT et al., "OMAR - A Haptic display for speech perception by deaf and deaf-blind individuals," IEEE Virtual Reality Annual International Symposium, Seattle, WA, Sep. 18-22, 1993.	
	105	EBERHARDT et al., "Including Dynamic Haptic Perception by The Hand: System Description and Some Results," DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1, ASME 1994.	
	106	FOKUMOTO, "Active Click: Tactile Feedback For Touch Panels," ACM CHI2001 Extended Abstracts, pp. 121-122, April 2001.	
	107	GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.	
	108	GOTOW et al., "Controlled Impedance Test Apparatus for Studying Human Interpretation of Kinesthetic Feedback," WA11-11:00, pp. 332-337	
	109	HOWE, "A Force-Reflecting Teleoperated Hand System for the Study of Tactile Sensing in Precision Manipulation," Proceedings of the 1992 IEEE International Conference on Robotics and Automation, Nice, France, May 1992.	
	110	IBM Technical Disclosure Bulletin, "Mouse Ball-Actuating Device With Force and Tactile Feedback," Vol. 32, No. 9B, February 1990.	
	111	IWATA, "Pen-based Haptic Virtual Environment," 0-7803-1363-1/93 IEEE, pp 287-292, 1993.	
	112	JACOBSEN et al., "High Performance, Dextrous Telerobotic Manipulator With Force Reflection," Intervention/ROV '91 Conference & Exposition, Hollywood, Florida, May 21-23, 1991.	
	113	JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039, August, 1990.	
	114	JONES et al., "A perceptual analysis of stiffness," ISSN 0014-4819 Springer International (Springer-Verlag); Experimental Brain Research, Vol. 79, No. 1, pp. 150-156, 1990.	
	115	KACZMAREK et al., "Tactile Displays," Virtual Environment Technologies.	
	116	KONTARINIS et al., "Display of High-Frequency Tactile Information to Teleoperators," Telemanipulator Technology and Space Telerobotics, Won S. Kim, Editor, Proc. SPIE Vol. 2057, pp. 40-50, Sep. 7-9, 1993.	
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	117	KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," PRESENCE, 4(4):387-402, 1995.
	118	LAKE, "Cyberman from Logitech," GameBytes, 1994.
	119	MARCUS, "Touch Feedback in Surgery," Proceedings of Virtual Reality and Medicine The Cutting Edge, Sep. 8-11, 1994.
	120	MCAFFEE, "Teleoperator Subsystem/Telerobot Demonstrator: Force Reflecting Hand Controller Equipment Manual," JPL D-5172, pp. 1- 50, A1-A36, B1-B5, C1-C36, January 1988.
	121	MINSKY, "Computational Haptics: The Sandpaper System for Synthesizing Texture for a Force-Feedback Display," Ph.D. Dissertation, MIT, June 1995.
	122	OUH-YOUNG, " Force Display in Molecular Docking," Order No. 9034744, p. 1-369, 1990.
	123	OUH-YOUNG, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, August 1995.
	124	OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95, Seoul, Korea, 21-24 August 1995.
	125	PATRICK et al., "Design and Testing of A Non-reactive, Fingertip, Tactile Display for Interaction with Remote Environments," Cooperative Intelligent Robotics in Space, Rui J. deFigueiredo et al., Editor, Proc. SPIE Vol. 1387, pp. 215-222, 1990.
	126	PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," Master of Science Thesis, MIT, Nov. 8, 1990.
	127	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.
	128	RABINOWITZ et al., "Multidimensional tactile displays: Identification of vibratory intensity, frequency, and contactor area," Journal of The Acoustical Society of America, Vol. 82, No. 4, October 1987.
	129	RUSSO, "The Design and Implementation of a Three Degree of Freedom Force Output Joystick," MIT Libraries Archives 08/14/1990, pp. 1-131, May 1990.
	130	RUSSO, " Controlling Dissipative Magnetic Particle Brakes in Force Reflective Devices," DSC-Vol. 42, Advances in Robotics, pp. 63-70, ASME 1992.

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	131	Safe Flight Instruments Corporation, "Coaxial Control Shaker," Part No. C-25502, 1 July 1967.	
	132	SCANNELL, "Taking a Joystick Ride," Computer Currents, Boston Edition, Vol. 9, No. 11, November 1994.	
	133	SHIMOGA, "Finger Force and Touch Feedback Issues in Dexterous Telemanipulation," Proceedings of Fourth Annual Conference on Intelligent Robotic Systems for Space Exploration, Rensselaer Polytechnic Institute, Sep. 30 - Oct. 1, 1992.	
	134	SMK Corporation, "Multi-Functional Touch Panel, Force-Feedback Type, Developed: A Touch Panel Providing a Clicking Feeling," http://www.smk.co.jp/whatsnew_e/628csc_e.html , September. 30, 2002.	
	135	SMK Corporation, "Force Feedback Type Optical Touch Panel Developed," SMK Corporation Website, October 30, 2002	
	136	SNOW et al., "Model-X Force-Reflecting-Hand-Controller," NT Control No. MPO-17851; JPL Case No. 5348, pp. 1-4, 06/15/1989.	
	137	STANLEY et al., "Computer Simulation of Interacting Dynamic Mechanical Systems Using Distributed Memory Parallel Processors," DSC-Vol. 42, Advances in Robotics, pp. 55-61, ASME 1992.	
	138	TADROS, "Control System Design for a Three Degree of Freedom Virtual Environment Simulator Using Motor/Brake Pair Actuators", MIT Archive © Massachusetts Institute of Technology, pp. 1-88, February 1990.	
	139	TERRY et al., "Tactile Feedback In A Computer Mouse," Proceedings of Fouteenth Annual Northeast Bioengineering Conference, University of New Hampshire, March 10-11, 1988.	
	140	WIKER, "Teletouch Display Development: Phase 1 Report," Technical Report 1230, Naval Ocean Systems Center, San Diego, April 17, 1989.	
	141	Synaptics, Inc., "Synaptics TouchPad Interfacing Guide", Second Edition, Downloaded August 26, 2003/	

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